OFFICE OF FINANCIAL MANAGEMENT

BUDGET AND ALLOTMENT SUPPORT SYSTEMS (BASS)

Automated Upload Transaction Option (AUTO)

DESIGN DOCUMENT

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Version 2.1 FINAL

Concept

The Automated Upload Transaction Option (AUTO) is a component of BASS that allows agencies to identify a tab-delimited file to upload into BASS systems. Use of AUTO is optional. As of this writing, BDS is the only BASS system accepting data via AUTO.

This initial release of AUTO was an opportunity for agencies to test internal processes to ensure AUTO will work for their 2002 Supplemental Budget. BASS anticipates the use of AUTO expanding for the 2003-05 budget development cycle. References to potential future changes for AUTO are noted near the end of this document.

Access

AUTO is available on the BASS Main Menu for users that have been granted access. Access will be granted to individual users. Please make sure that the BASS team is aware of your intent to use AUTO as soon as possible. Contact the BASS Help line at 360 725-5278.

SPECIAL NOTE ON VERSIONS: During the testing period, AUTO will force all uploads into BDS version XX, a regular budget version. This will allow you to test the integration of AUTO and your tab-delimited file without risk to affecting current data in BDS. Once an agency has demonstrated that their tab-delimited file works with AUTO, this version restriction will be lifted so that agencies can upload into a version of their choice. AUTO will add version XX to BDS for AUTO testing only. Version XX should not be used in BDS for any other purpose. Agencies will not be able to submit Version XX to OFM. They will be able to copy Version XX to another version to then be uploaded.[1]

AUTO Components

AUTO Upload tab – This is where AUTO begins with the option for selecting a file to upload and display data as it is being transferred. When the upload is executed it will delete all previous records for the decision package/record type (BDS worksheet) being uploaded, and then will add all the data to the BDS[2]. For example, an upload file that only contains records for decision package M2-AA fund detail will delete existing BDS fund detail data then replace with uploaded fund data in the BDS; however Object, FTE, Revenue, and Recommendation Summary text will be left intact. The decision package will be added if it does not exist. ***A version must exist in BDS before decision packages can be uploaded[3].***

> **Uploading a New Decision Package** – AUTO will create the decision package based on the information contained in the tab-delimited file. New decision packages will be given a priority of zero regardless of the indicator in the tab-delimited file.

Uploading an Existing Decision Package – AUTO will only upload the BDS worksheet data contained within the tab-delimited file. All other decision package information in the file will be ignored in favor of decision package information already contained in BDS. This includes title, status, locked indicators, and priority[4].
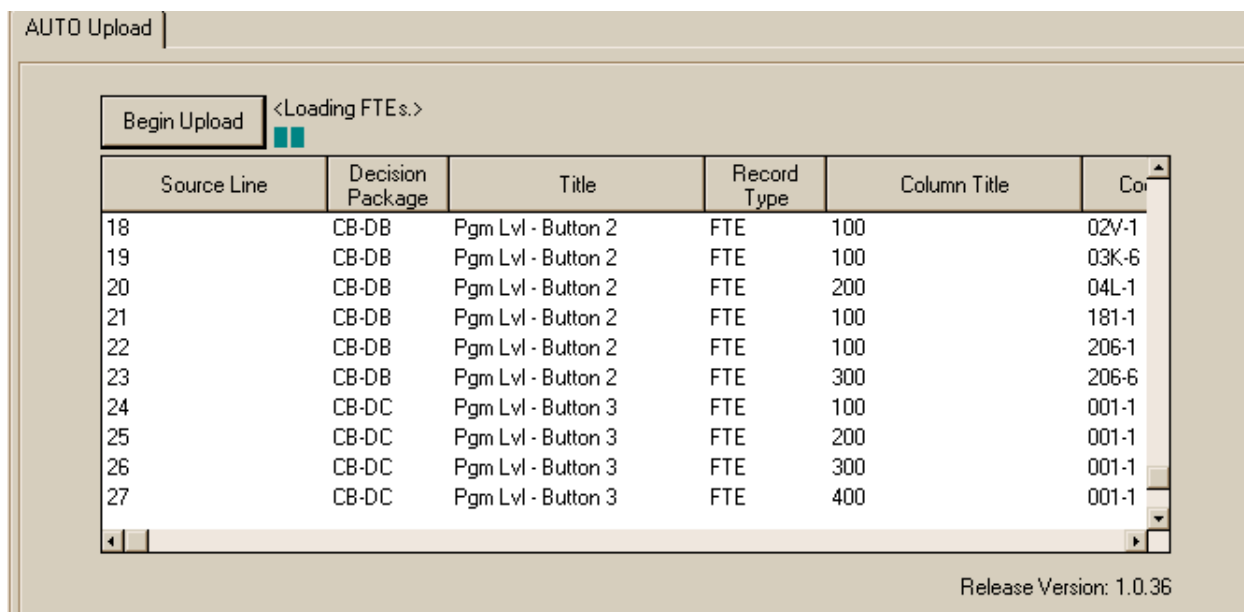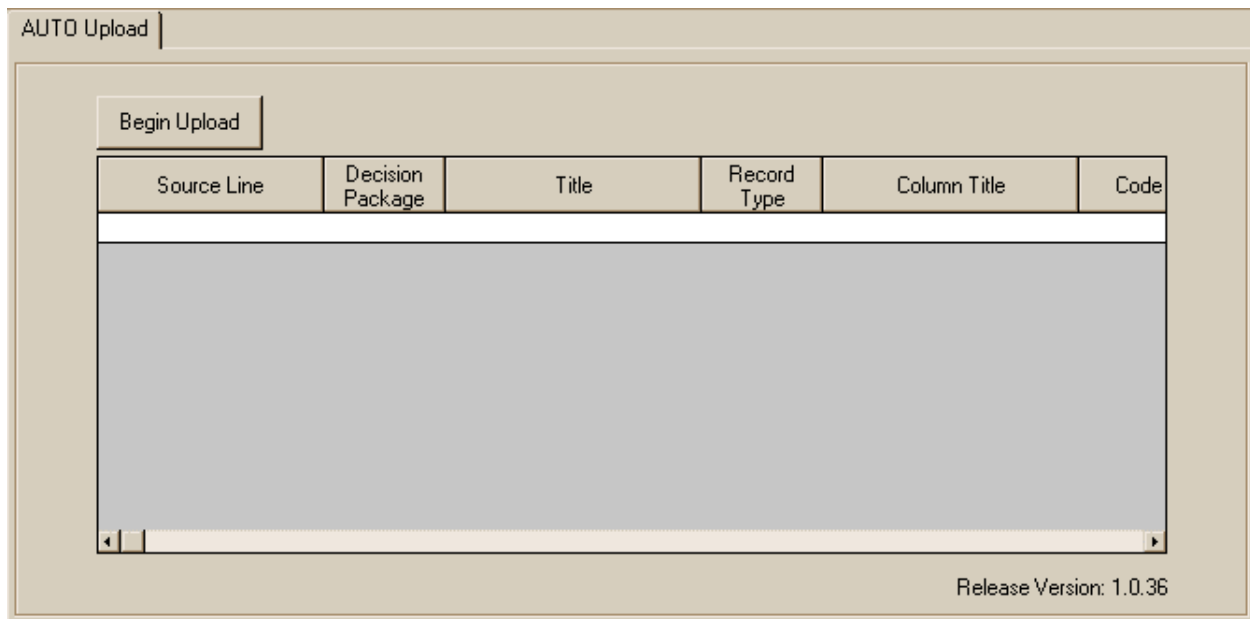

Begin Upload – This button invokes the AUTO File Open screen where the user can select the tab-delimited file to be uploaded.
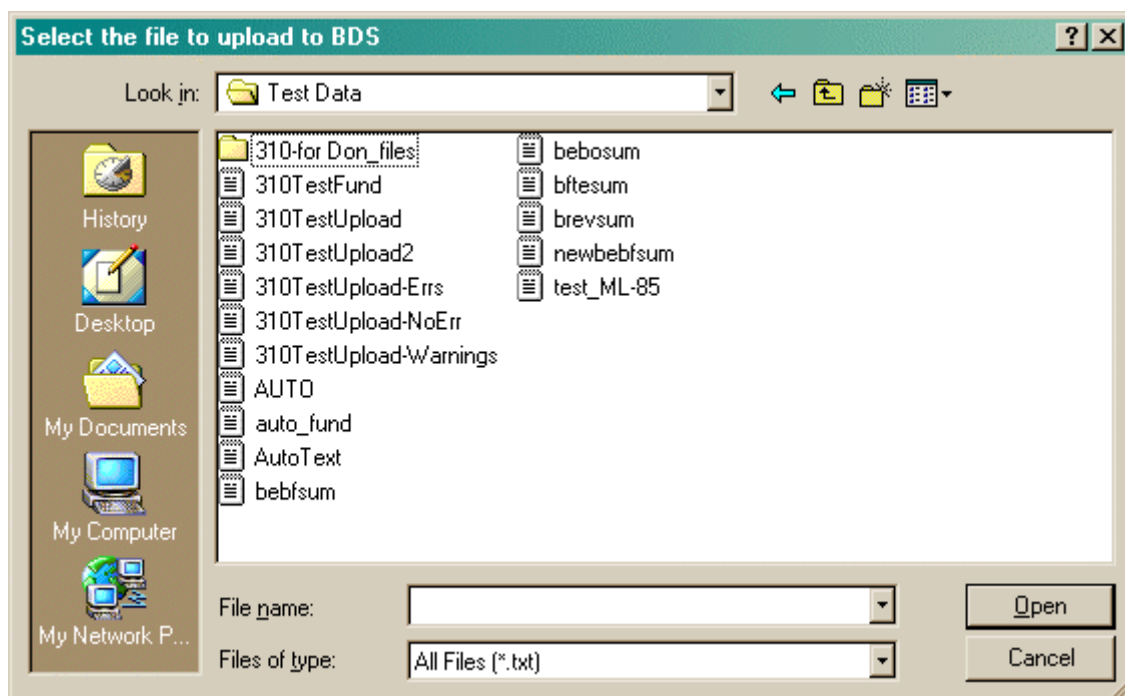
The File Open dialog box is consistent with Microsoft products. The only file type the user can select is a tab-delimited text file. Only one file may be uploaded at a time.

Once a file has been selected the user will view the upload in the following screen.

AUTO Upload

Begin Upload   <Loading FTEs.>

Source Line	Decision Package	Title	Record Type	Column Title	Co
18	CB-DB	Pgm Lvl - Button 2	FTE	100	02V-1
19	CB-DB	Pgm Lvl - Button 2	FTE	100	03K-6
20	CB-DB	Pgm Lvl - Button 2	FTE	200	04L-1
21	CB-DB	Pgm Lvl - Button 2	FTE	100	181-1
22	CB-DB	Pgm Lvl - Button 2	FTE	100	206-1
23	CB-DB	Pgm Lvl - Button 2	FTE	300	206-6
24	CB-DC	Pgm Lvl - Button 3	FTE	100	001-1
25	CB-DC	Pgm Lvl - Button 3	FTE	200	001-1
26	CB-DC	Pgm Lvl - Button 3	FTE	300	001-1
27	CB-DC	Pgm Lvl - Button 3	FTE	400	001-1

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Status Bar – A status bar to the right of the upload button indicates the progress of the upload process.

Source Line - This column displays the line of the text file of the uploading records. This line number is adjusted so that it should be in alignment with the text file when pulled into Excel with a header row.
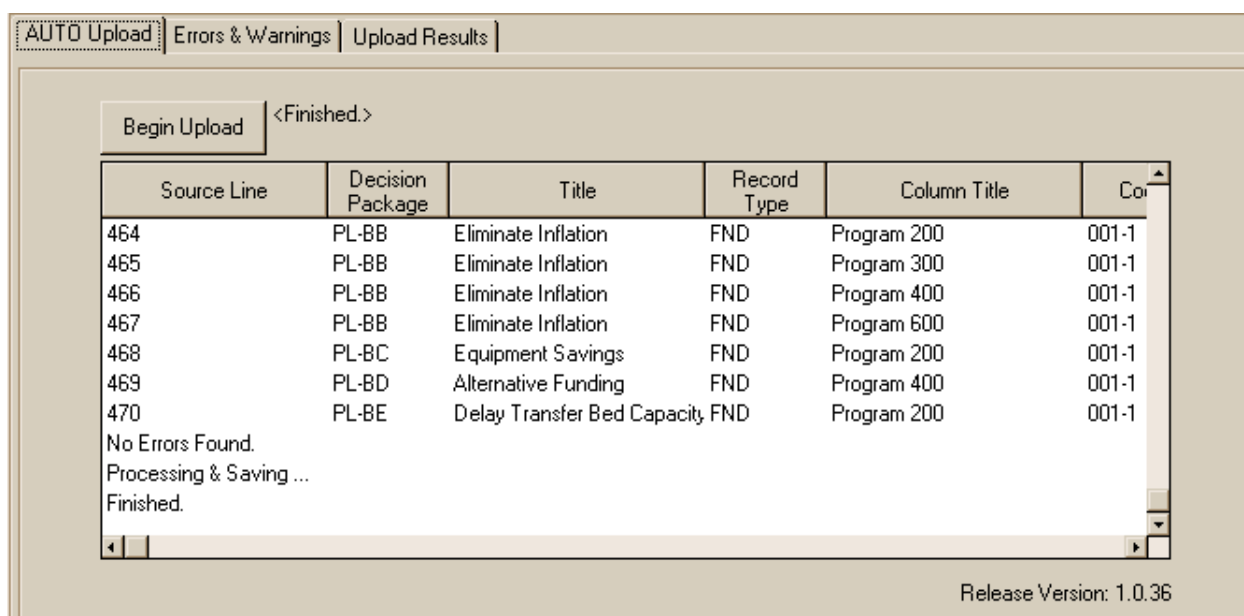
Decision Package – This column displays the decision package budget level and code of the corresponding records.

Title - This column displays the title of the decision package in the corresponding records.

Record Type - This column displays the type of record -- either fund (FND), object (OBJ), FTE, revenue (REV), or recommendation summary text (REC).
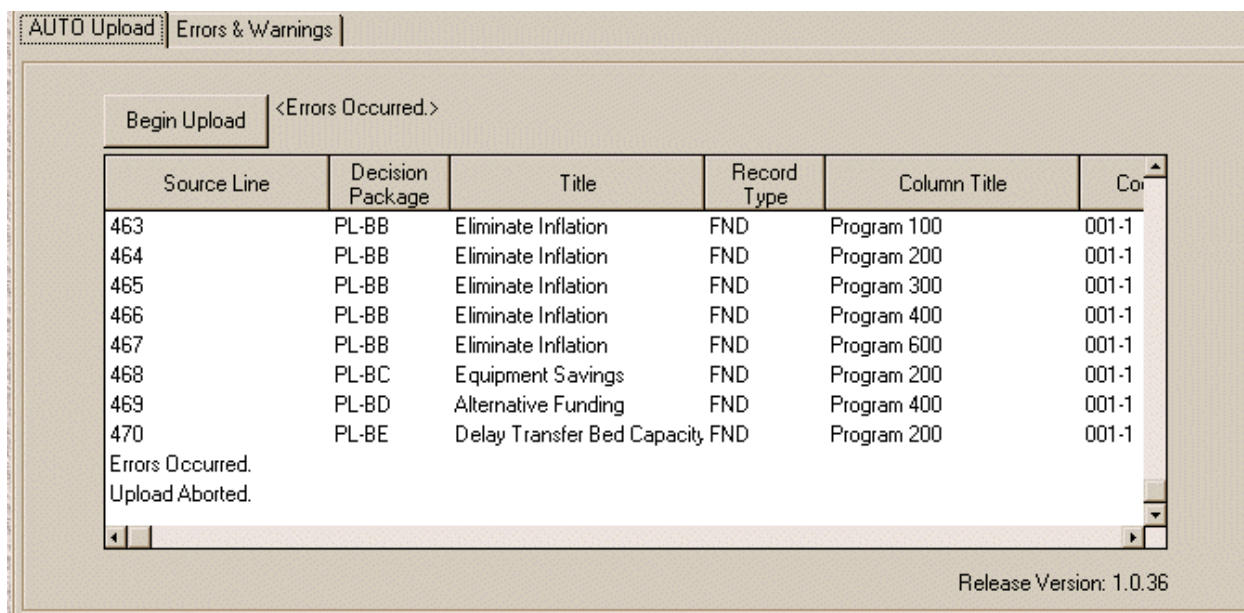
Column Title – This column displays the title of the column for the corresponding record.

Code – This column displays the main code to define the record. The code may represent fund or object dependent on record type.

```
[ AUTO Upload ] [ Errors & Warnings ] [ Upload Results ]

[ Begin Upload ]   <Finished.>
```

Source Line	Decision Package	Title	Record Type	Column Title	Co
464	PL-BB	Eliminate Inflation	FND	Program 200	001-1
465	PL-BB	Eliminate Inflation	FND	Program 300	001-1
466	PL-BB	Eliminate Inflation	FND	Program 400	001-1
467	PL-BB	Eliminate Inflation	FND	Program 600	001-1
468	PL-BC	Equipment Savings	FND	Program 200	001-1
469	PL-BD	Alternative Funding	FND	Program 400	001-1
470	PL-BE	Delay Transfer Bed Capacity	FND	Program 200	001-1

```
No Errors Found.
Processing & Saving ...
Finished.
```

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There will be three tabs available once an upload has been completed without errors.

or


```
[ AUTO Upload ] [ Errors & Warnings ]

[ Begin Upload ]   <Errors Occurred.>
```

Source Line	Decision Package	Title	Record Type	Column Title	Co
463	PL-BB	Eliminate Inflation	FND	Program 100	001-1
464	PL-BB	Eliminate Inflation	FND	Program 200	001-1
465	PL-BB	Eliminate Inflation	FND	Program 300	001-1
466	PL-BB	Eliminate Inflation	FND	Program 400	001-1
467	PL-BB	Eliminate Inflation	FND	Program 600	001-1
468	PL-BC	Equipment Savings	FND	Program 200	001-1
469	PL-BD	Alternative Funding	FND	Program 400	001-1
470	PL-BE	Delay Transfer Bed Capacity	FND	Program 200	001-1

```
Errors Occurred.
Upload Aborted.
```

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Messages will be displayed to the user as the upload finishes giving further information on the results, including whether errors or warnings have occurred. A scroll bar allows the users to view the entire list. If the upload files contain only warnings, the message at the bottom of this screen will say, "upload paused". Users can either select a new file by going back to the **Auto Upload** tab and clicking **Begin Upload** to upload a new or an updated copy of the same file, or continue from the Errors & Warnings tab described below.

Users will be taken to the **Errors & Warnings** tab if errors or warnings exist, or the **Upload Results** tab if no errors exist. Users may return to the AUTO Upload tab to review uploaded records anytime until the AUTO screen is closed or a new upload is initiated.

Errors & Warnings Tab – If there are no errors or warnings in the uploaded data, the first line of the table will read "No Errors Found" in the message column (see below).

Source Line – This column displays the line of the text file where the error or warning exists. This line number is adjusted so that it should be in alignment with the text file when pulled into Excel with a header row.

Type

File Format – Indicates that there are errors in the format of the tab-delimited file. File format problems may either be warnings or fatal errors.

Data Integrity – Indicates that the data being uploaded is not consistent with BDS data release rules (i.e., an invalid fund, wrong Fund/Appropriation Type combination, etc.). All BDS data errors are fatal and must be fixed in the source tab-delimited file before an upload is possible.

Microsoft OLE DB Provider for SQL Server – A SQL server error has occurred. All SQL errors are fatal. The exact error message will be displayed under message. You may contact the BASS Help line at 360 725-5278 for further instructions. In this case, invalid upload data will be found in BDS. Please delete the version or decision package, and re-upload.[5]

<u>Severity</u>

<u>Warning</u> – Lets the user know that there is a problem with the data but that it may still be uploaded to BDS. In most cases this will result in excess information being truncated upon transfer.

<u>Fatal Error</u> – A fatal error indicates that the data cannot be uploaded to BDS. No data will be uploaded if a fatal error is in any of the data of the text file.

<u>Message</u> – A description of the error found. This will include a statement of what will upload in the event the user chooses to continue regardless of warnings.

AUTO Upload	Errors & Warnings

All fatal errors must be fixed before data will upload. Fix the errors and select your file to upload.
You may continue to upload a file that contains only warnings.

Source Line	Type	Severity	Message
28	File Format	Warning	The column title length exceeds the max allowable, if saved the data will be truncated
104	File Format	Warning	The decision package control length exceeds the max allowable, if saved the data wi

Continue   Print

User will be automatically taken to the **Upload Results** tab if there are no errors or warnings. They may access any tab after this point to review the detail.

<u>Continue</u> – The continue button is only available when warnings were found during the upload. In the event only warnings are detected, this option allows the user to proceed with the upload under the conditions noted under Message.

Print – This button sends a copy of the warnings and errors report to the user's default printer.

Upload Results

Concept – This screen allows the user to get a summarized view by decision package of what was uploaded to BDS.

Version – This column displays the version data has been uploaded into.

Code – Displays the budget level/code of each decision package uploaded.

<u>Package Program</u> – The package program (if any) identified with the decision package. This is an identifier for the decision package and does not correlate with how data is coded by program within the worksheet.

<u>Title</u> – Displays the title of each decision package uploaded.

<u>Print</u> – Prints the table of the record upload results at the user's default printer location.

Tab-Delimited File

<u>Concept</u> – Agencies are responsible for creating their own tab-delimited files that meet the specifications provided in this document. OFM will host user discussions where agencies may share information and knowledge on creating tab-delimited files from internal systems and spreadsheets. A complete matrix of record/field information can be found in Appendix I.

Testing has found that over 2,000 rows of data will create server slow-down. You will be required to divide your file into separate tab-delimited files for upload if your upload would exceed this limit.[6]

<u>Record Type</u> – AUTO for BDS supports five record types. These record types may be combined in one tab-delimited file or sent separately.
- ➢ Fund
- ➢ Object
- ➢ FTE
- ➢ Revenue
- ➢ Recommendation Summary Text

<u>Tab-Delimited File Creation</u> – Excel is the simplest method of creating a tab-delimited file. Database applications will also save data as tab-delimited. The discussion of the file specifications will assume Excel as the vehicle. In the event an agency is creating the file through another application, they can verify the results by viewing the data in Excel. It is recommended that you format the worksheet cells as text to avoid losing leading zeros in code cells (i.e., fund "001" appears "1"). You may find it is easier to update the Excel file and re-save as the tab-delimited file.

It is recommended that you name your text files in a manner that makes the data easy to identify (i.e., Verion25Upload.txt or V25-ML98.txt Upload).

<u>Title Row</u> – A title row must be present in the tab-delimited file. These titles will not be picked up by AUTO, but AUTO will begin pulling data on the second row. If data, rather than the titles, is present on the first row, it will not be uploaded into BDS.

<u>Fields</u> – Each field is described in Appendix I. Each field is referenced by a numeric index number, the corresponding Excel column reference, field title (as defined in BDS database), field characteristics, and example. In index rows 33-35 (or Excel columns AH, AI, AJ), the meaning of the field will change depending on record type as noted. Bolded fields are key-fields

(distinguishes unique records). Asterisked (*) indexes are required to have data. Further points of clarification are noted here.

Budget Level – The following are used to describe the budget level of the decision package:

Budget Level	Enter
Current Biennium (appropriation)	CB
Carry-forward Level	CL
Maintenance Level (mandatory)	M1
Maintenance Level (other)	M2
Performance Level	PL

DP Status (Index #10) – The following decision package statuses are available in BDS.

Status	Enter
Draft	D
Final	F
Placeholder	P
Final-Revised	R

At the present time, all decision packages uploaded are given a status of D for draft if the upload created the decision package. If the decision package already existed in BDS the status is ignored for the current status of the existing decision package.[7]

Locked (Index #11) – The upload Locked indicator option is not functional. If the decision package already exists in BDS, the locked status of the existing decision package will remain. If it is a new decision package, it will always be uploaded as Not Locked.[8]
Priority – Priority indicators in your upload file will be ignored in BDS. If the decision package already exists, that priority will remain. If the decision package is new, a priority of 0 will be assigned[9].

Record Type (Index #12) – This field tells BDS what BDS worksheet (or narrative) to load the data into. Enter the following for the corresponding record type:

Record Type	Enter
Fund	FND
FTE	FTE
Revenue	REV
Object	OBJ
Recommendation Summary Text	*REC

Excel requires Recommendation Summary text to be no more than 10,000 characters to upload properly[10].

Sub Program – Sub program in AFRS is only two digits. Enter 00 (zeros) at the end of this sub program number to meet the 4-character requirement.

DSHS Source – This field is required for DSHS. Do not use this field unless uploading DSHS data.

Biennium – If the budget level is CB, ensure that biennium is the current biennium and not the ensuing budget biennium. (i.e., if budgeting for 2003-05 regular budget, CB packages would have a biennium of 2001-03).

Fiscal Year 1 & Fiscal Year 2 - If the budget level is CB ensure that fiscal year indicators reflect the current biennium and not the ensuing budget biennium (i.e., if budgeting for 2003-05 regular budget, CB packages would have a fiscal year of 2002 and 2003).

FY1 & FY2 Amounts – Dollars should be entered as whole numbers without commas, parenthesis, or dollar signs. FTEs should be entered with one decimal place (i.e., 10.2 or 9.0) or a whole number (10). Negative numbers must be displayed with a minus sign (-) in front of the number.

Checklist for AUTO Upload

- ❑ File is saved at tab-delimited text file.
- ❑ All fields requiring data have been filled.
- ❑ Decision package title is the same for all like decision package codes.
- ❑ Agency priority, program priority, decision package status, and locked are the same for all like decision package budget level/decision package code.
- ❑ Column title is the same for all like coded rows.
- ❑ Only one version is listed in the tab-delimited text file.
- ❑ If a new decision package, not an update, make sure the decision package code is not already being used in BDS for a different decision package title.

Verifying Data Results

The following methods will help you to validate the data in BDS with your internal system/worksheet data:

- ➢ Open the decision package in BDS to view the expenditure, revenue, and/or narrative information.
- ➢ Run an OFM Decision Package report.
- ➢ Run an OFM Recommendation Summary report.
- ➢ Run an OFM Program Summary report.
- ➢ Run the BRS-BDS Decision Package Detail by Budget Level report.
- ➢ Download your uploaded version via the BRS-BDS data download option.

Important to Remember

1. Agencies will not be able to submit Version XX (testing version) to OFM. They will be able to copy Version XX to another version to then be submitted to OFM.
2. When the upload is executed it will delete all previous records for the decision package/record type (BDS worksheet) being uploaded, and then will add all the data to the BDS
3. A version must exist in BDS before decision packages can be uploaded
4. AUTO will only upload the worksheet data contained within the tab-delimited file when the decision package already exists in BDS. All other decision package information in the file will be ignored in favor of decision package information already contained in BDS
5. If a SQL server error has occurred, the exact error message will be displayed under a message with a note to contact the BASS Help line at 360 725-5278 for further instructions. In this case, a partial upload may be found in BDS. Please delete the version or decision package, and re-upload.
6. Testing has found that over 2,000 rows of data will create server slow-down. You will be required to divide your file into separate tab-delimited files for upload if your upload would exceed this limit.
7. At the present time, all decision packages uploaded are given a status of D for draft if the upload created the decision package. If the decision package already existed in BDS the status is ignored for the current status of the existing decision package.
8. The upload Locked indicator option is not functional. If the decision package already exists in BDS, the locked status of the existing decision package will remain. If it is a new decision package, it will always be uploaded as Not Locked.
9. Priority indicators in your upload file will be ignored in BDS. If the decision package already exists, that priority will remain. If the decision package is new, a priority of 0 will be assigned.
10. Excel requires Recommendation Summary text to be no more than 10,000 characters to upload properly.

Future Enhancements

The following enhancement options may be included in future releases of AUTO:

➢ Make AUTO uploads available for more of the BASS applications.
➢ Make it possible to access AUTO from within the application that is being uploaded to.
➢ Update BDS to not allow users to enter version XX directly into BDS.
➢ Ability to save Errors & Warnings report to a file.
➢ Ability to double-click a row of the **Upload Results** tab to open the decision package in BDS directly.

Appendix I
Excel Field Definition Matrix

(Next Page)

Excel Column	index	FUND DATA	FTE DATA	OBJECT DATA	REVENUE DATA	RECSUM DATA	FUND DATA-TYPE(LENGTH)	FUND TYPE EXAMPLE
A	0	**Version***	**Version***	**Version***	**Version***	**Version***	String(2)	CD
B	1	version_title*	version_title*	version_title*	version_title*	version_title*	String(35)	CID Demonstration
C	2	**approp_period***	**approp_period***	**Approp_period***	**approp_period***	**approp_period***	String(7)	2001-03
D	3	**Agency***	**Agency***	**Agency***	**Agency***	**Agency***	String(3)	
E	4	**package_program**	**package_program**	**package_program**	**package_program**	**package_program**	String(3)	
F	5	**budget_level***	**budget_level***	**budget_level***	**budget_level***	**budget_level***	String(2)	PL
G	6	**decision_package_id***	**decision_package_id***	**decision_package_id***	**decision_package_id***	**decision_package_id***	String(2)	AA
H	7	dp_control_title*	dp_control_title*	dp_control_title*	dp_control_title*	dp_control_title*	String(35)	Workload Increases
I	8	agency_priority	agency_priority	agency_priority	agency_priority	agency_priority	String(3)	0
J	9	program_priority	program_priority	program_priority	program_priority	program_priority	String(3)	0
K	10	dp_status	dp_status	dp_status	dp_status	dp_status	String(1)	D
L	11	Locked	locked	locked	locked	locked	String(1)	Y
M	12	**record_type***	**record_type***	**record_type***	**record_type***	**record_type***	String(3)	FND
N	13	**column_title***	**column_title***	**column_title***	null	null	String(35)	Administration
O	14	*master_index*	*master_index*	*master_index*	null	null	String(10)	
P	15	*pgm_index*	*pgm_index*	*pgm_index*	null	null	String(5)	
Q	16	**Program**	**program**	**program**	**program**	**program**	String(3)	100
R	17	**Subprogram**	**subprogram**	**subprogram**	null	null	String(4)	1000
S	18	**Activity**	**activity**	**activity**	null	null	String(2)	
T	19	**Subactivity**	**subactivity**	**subactivity**	null	null	String(2)	
U	20	**Task**	**task**	**task**	null	null	String(2)	
V	21	*org_index*	*org_index*	*org_index*	null	null	String(4)	
W	22	**Division**	**division**	**division**	null	null	String(2)	
X	23	**Branch**	**branch**	**branch**	null	null	String(2)	
Y	24	**Section**	**section**	**section**	null	null	String(2)	
Z	25	**Unit**	**unit**	**unit**	null	null	String(2)	
AA	26	**cost_center**	**cost_center**	**cost_center**	null	null	String(2)	
AB	27	**proj_no**	**proj_no**	**proj_no**	null	null	String(4)	
AC	28	**Subproj**	**subproj**	**subproj**	null	null	String(2)	
AD	29	**proj_phase**	**proj_phase**	**proj_phase**	null	null	String(2)	
AE	30	**budget_unit**	**budget_unit**	**budget_unit**	null	null	String(3)	F01
AF	31	**activity_inventory**	**activity_inventory**	**activity_inventory**	null	null	String(4)	
AG	32	*approp_index*	*approp_index*	null	null	null	String(3)	
AH	33	**Fund***	**Fund***	**Object***	**Fund***	null	String(3)	001
AI	34	**approp_type***	**approp_type***	**subobject**	**major_source***	null	String(1)	1
AJ	35	**dshs_source+**	null	**subsubobj**	**Source***	null	String(4)	
AK	36	Biennium*	Biennium*	Biennium*	Biennium*	null	String(7)	2001-03
AL	37	fiscal_year_1*	fiscal_year_1*	fiscal_year_1*	fiscal_year_1*	recsum_text*	String(4)	2002
AM	38	fiscal_year_2*	fiscal_year_2*	fiscal_year_2*	fiscal_year_2*	null	String(4)	2003
AN	39	fy1_amount	fy1_amount	fy1_amount	fy1_amount	null	String(9)	25000
AO	40	fy2_amount	fy2_amount	fy2_amount	fy2_amount	null	String(9)	26000

* Required fields
+ Required by DSHS, other agencies should be blank
*Index fields are not yet available in BDS for upload. Placeholder fields are defined
in the upload requirement. Any data in these fields will be ignored by AUTO.*